





CENTRAL FACILITY

AICTE

IDEA (Idea Development Evaluation & Application) Lab



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ABOUT US

Under the guidance of AICTE, the Meerut Institute of Engineering and Technology, Meerut has established the IDEA (Idea, Development, Evaluation and Application) Lab to inspire students to apply their knowledge of science, technology, engineering, and mathematics (STEM) fundamentals in practical contexts. This approach aims to facilitate enriched, hands-on learning experiences, fostering learning by doing and promoting product visualization (idea to prototype).

Beyond enhancing technical skills, the IDEA lab plays a pivotal role in nurturing imagination and creativity among students, faculties, and other stakeholders. Additionally, the IDEA lab offers a foundational training ground for essential 21st-century skills such as design thinking, problemsolving, collaboration, communication, and lifelong learning.



Innovation is implementing new idea that create value"



VISION



- Nurture innovators to ideate in areas of societal importance.
- Design Thinking Process to spur creativity.
- Opportunity for everyone to innovate, ideate & design solutions, irrespective of their age.
- Capacity building of emerging innovators in evolving technologies & designing their innovations from ideation to impactful solutions.
- Partnership with local industries/institutions in problem solving through innovative offerings in terms of products, services & processes & identifying innovation challenges.

MISSION



"At AICTE Idea Lab, our mission is to cultivate a dynamic ecosystem that fosters innovation, creativity, and excellence in the field of education, research, and technology. We are dedicated to nurturing a culture of entrepreneurship, problem-solving, and collaboration among students, faculty, and industry professionals.



OBJECTIVES



01



Spread the culture of innovation among students, & other stakeholders.

02



Motivate students to ideate & pursue creativity.

03



Train students to become imaginative, creative & capable of converting their ideas into prototypes.

04



Provide all possible facilities under one roof for the conversion of ideas into reality.

05



Generate a wide range of creative ideas & concepts across various domains & industries.

06



Address real world challenges & problems through innovative solutions & approaches.



FUNDING DETAIL



NAME OF THE FACILITY	AICTE IDEA Lab
LOCATION	ADMIN BLOCK, MIET MEERUT
GRANT/FUNDING	1,34,79,000/-
FUNDING DETAILS	MIET-88,38,000/- AICTE IDEA Lab-46,41,000/-









We, at AICTE IDEA Lab strongly believe that the holistic development of students is possible by focusing on core areas which are - Concept Based Learning and Comprehensive Industrial Exposure.

We offer 360-degree nurturing for overall grooming and developing global competency. We are committed to excellence through innovations in the teaching and learning process and have been successful in maintaining high academic standards by taking appropriate steps to bridge the gap between industry and academia.





COORDINATOR'S DESK

Welcome to AICTE IDEA Lab at Meerut Institute of Engineering & Technology, Meerut. I am thrilled to extend a warm greeting to you. Our central facility is dedicated to fostering a dynamic learning environment where innovation, research, and practical skills converge to shape the future of students with multi-disciplinary approach. We take pride in our committed faculty who are not only experts in their fields but also passionate mentors, guiding students towards academic excellence and professional success. At AICTE IDEA Lab MIET, Meerut, we emphasize a hands-on approach to learning, integrating cutting-edge technology and industry-relevant projects into our curriculum. Our goal is to equip students with the knowledge and skills needed to tackle real-world challenges.

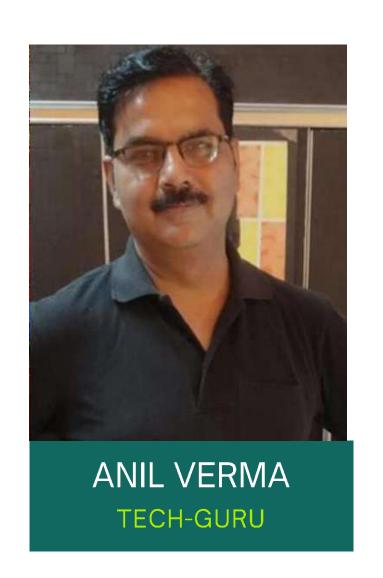


















OVERVIEW OF AICTE IDEA Lab





ONGOING IMPLEMENTATION OF ACTIVITIES LIKE FACULTY DEVELOPMENT PROGRAM (FDP), SKILLING DEVELOPMENT PROGRAM (SDP), AWARENESS PROGRAM, IDEATHON, BOOTCAMP, OPEN DAY FOR SCHOOL LEARNERS

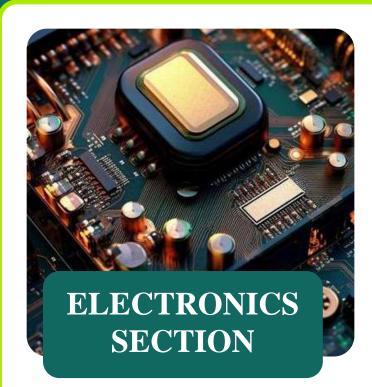




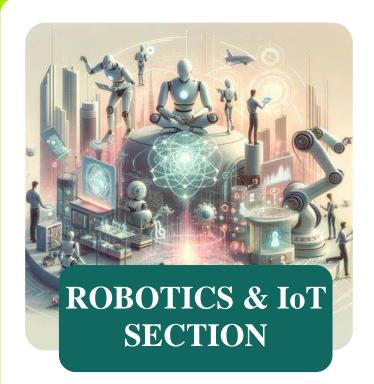
OUR FACILITIES



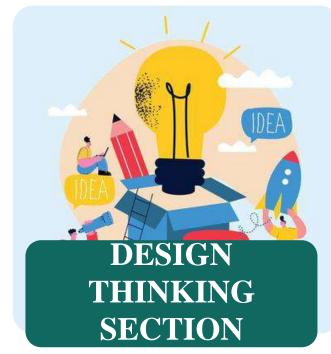
Our Mechanical Section
provides access to cuttingedge equipment,
laboratories, and workshops,
fostering hands-on learning
experiences essential for
their academic and
professional growth.



Our Electronics Section offers students a dynamic learning environment to explore circuits, design projects, and conduct experiments, nurturing innovation and expertise in the field of electronics.



Our Robotics and IoT Section,
providing students with
equipment, and expert guidance
to delve into robotics, automation,
and Internet of Things
technologies, fostering hands-on
experimentation and innovation
for tomorrow's interconnected
world."



Unlock creativity and problemsolving skills in our Design
Thinking facility, where students
engage in collaborative workshops,
brainstorming sessions, and
prototyping activities, fostering a
culture of innovation and humancentered design to tackle realworld challenges."







Equipment Name	CREALITY K1C 3D
	PRINTER
Bed size	220*220mm
Machine Weight	12.4kg
Rated Voltages	100-120V /200-240V, 50/60Hz
Rated Power	350W
Supported Filament	PLA/ABS/Carbon/ASA/TPU





Equipment Name	ANET 3D PRINTER
Bed size	220*220*250mm
Machine Weight	12.4kg
Rated Voltages	100-120V /200-240V, 50/60Hz
Rated Power	250W
Supported Filament	PLA









Equipment Name	MAKERBOT 3D PRINTER
Bed size	2.5L X 19.9W X 15.0H cm
Machine Weight	33.6.0 kg [35.3 lbs]
Rated Voltages	100-240 VAC; 0.76-0.43 A; 50/60 Hz; 100W
Rated Power	250W
Supported Filament	PLA/ABS/Carbon





Equipment Name	AWC C02 LASER
	MACHINE
Bed size	8ft*4ft
Machine Weight	300 kg
Working Voltage	230V/50Hz
Laser Power	100W
Supported Non-	MDF/Acrylic/Mirror
Material	Sheet









Equipment Name	CNC ROUTER MACHINE
Bed size	600*400 mm
Machine Weight	350 kg
Rated Voltages	220 V
Rated Power	2.2kw
Supported Material	WPC, Aluminium, Mild steel, Copper, Wood





Equipment Name	FIBER LASER MACHINE
Bed size	1300*900 mm
Machine Weight	250 kg
Working Voltage	230V/50Hz
Laser Power	150W
Workable Material	Aluminium, copper, Zinc









S.NO.	NAME OF ACTIVITY	COUNT
1	Ideathon	2
2	Skilling Programme	32
3	Awareness Programme	7
4	Open Day For School Students	16
5	School Teacher Awareness Programme	1
6	Faculty Development Programme (FDP)	12
7	Professional Skilling	1
	TOTAL NO. OF EVENTS	71+15*



ACTIVITY SUMMARY



Particulars	2022	2023	2024
No. of activities	8	46	13+19*
No. of participants	220	1440	462+479*

^{*}not uploaded on the AICTE IDEA Lab portal due to issues with the website



DESIGN DEVELOPED



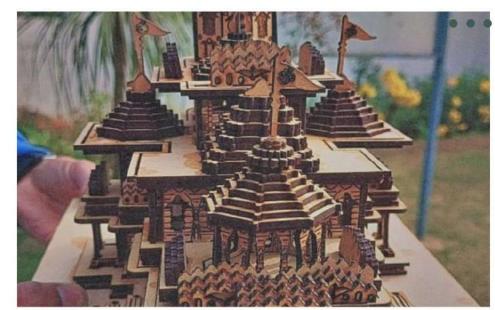
Particulars	2022	2023	2024
No. of design	08	43	23+
IPR Generated	03	_	_
No. of Momento design	_	8	2



GLIMPSE OF DESIGN DEVELOPED @ AICTE IDEA Lab, MIET

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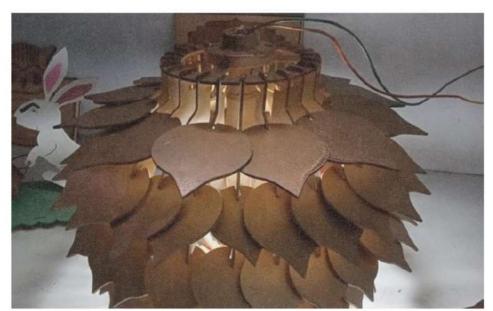
AYODHYA RAM MANDIR Material:MDF



WALL ART
Material:Acrylic



TEMPLE
Material:WPC, Acrylic, PLA



. . .

CEILING LAMP
Material:MDF

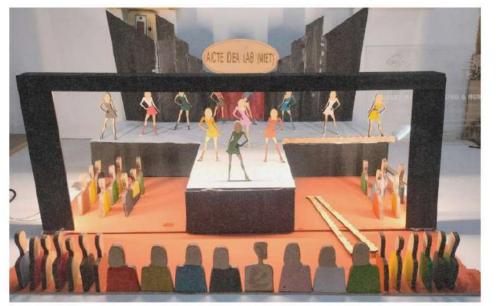


GLIMPSE OF DESIGN DEVELOPED @ AICTE IDEA Lab, MIET



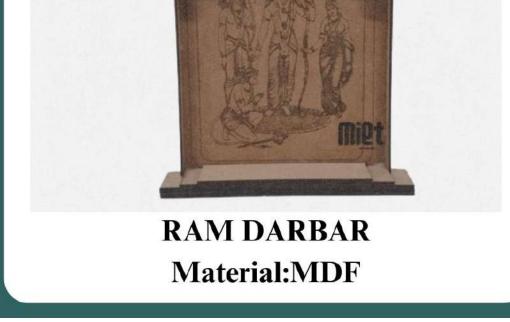


ORGANISER Material: MDF



RAMP WALK STAGE
Material: MDF







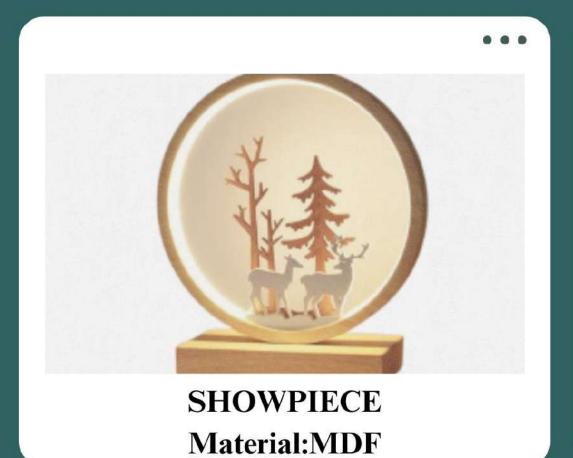
GLIMPSE OF DESIGN DEVELOPED @ AICTE IDEA Lab, MIET





WALL CLOCK
Material: MDF, WPC, Acrylic









PROJECTS



- LINE FOLLOWER ROBOT (LRF)
- SPIDER ROBO
- DRONE
- HOME AUTOMATION
- SANITIZER MACHINE
- AGRICULTURE
- BLUETOOTH RC CAR
- FIRE PROTECTION SYSTEM
- WIND TURBINE
- MINI POWER GENERATOR
- SOUND BOOSTER

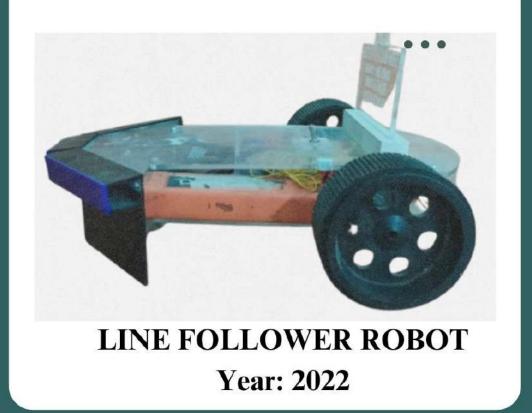




GLIMPSE OF PROJECTS @AICTE IDEA Lab, MIET









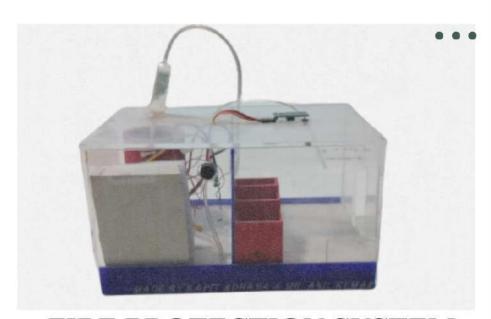
Year: 2022





GLIMPSE OF PROJECTS @AICTE IDEA Lab, MIET





FIRE PROTECTION SYSTEM Year: 2023





SOUND BOOSTER Year: 2023





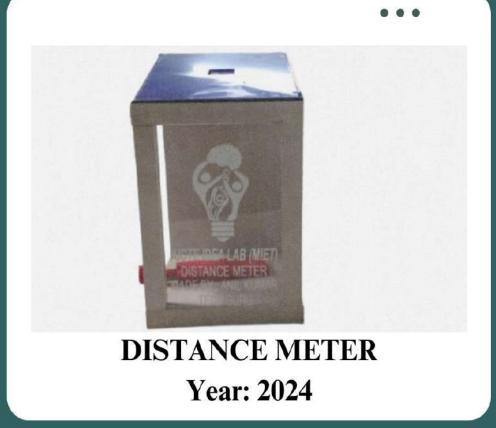
GLIMPSE OF PROJECTS @AICTE IDEA Lab, MIET









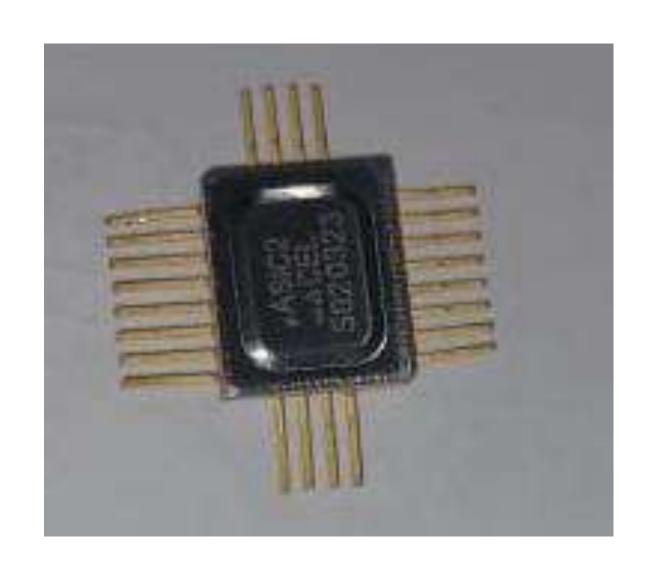




INDUSTRIAL CONSULTANCY WORK



Consultancy work of cutting IC Pins from FILM ELECTRONICS MEERUT





ACHIEVEMENTS



PATENT 01 DETAILS

PATENT NAME	Smart Mask
Patent Applicant IDEA Lab Id	IDEAL0172FAA4538/IDEAL0172FAA4539
Patent Application No.	356898-001
Receipt Of Application (CBR)	212249
Date of Application Filling	2022-01-18
Patent Status	Granted



ACHEVEMENTS



PATENT 02 DETAILS

PATENT NAME	IoT Enabled Smart Diaper
Patent Applicant IDEA Lab Id	IDEAL0172FAA4538/IDEAL0172FAA4539
Patent Application No.	358850-001
Receipt Of Application (CBR)	124047
Date of Application Filling	2022-01-18
Patent Status	Granted



ACHEVEMENTS



PATENT 03 DETAILS

PATENT NAME	Hands-Free Water Tap Mechanism
Patent Applicant IDEA Lab Id	IDEAL0172FAA1914
Patent Application No.	356926-001
Receipt Of Application (CBR)	212271
Date of Application Filling	2022-01-18
Patent Status	Granted



GLIMPSE OF PATENT CERTIFICATE @AICTE IDEA Lab, MIET







ORIGINAL

मुल/No : 124229



GOVERNMENT OF INDIA पेटेंट कार्यालय THE PATENT OFFICE

डिजाइन के पंजीकरण का प्रमाणपत्र CERTIFICATE OF REGISTRATION OF DESIGN

356898-001 विजादन सं. / Design No. 18/01/2022 तारीख / Date

पारस्परिकता तारीख / Reciprocity Date*

देश / Country

प्रमाणित किया जाता है कि संतरन प्रति में चर्णित दिजाइन जो SMART MASK से संबंधित है, का पंजीकरण, खेणी

29-02 # 1.Dr. Amit Kumar Ahuja 2, Ms. Himani Varolia 3,Mr. Amit Kumar 4,Mr. Arman Ul Haque 5.Mr. Anil Kumar 6.Meerut Institute Of Engineering & Technology (Miet) के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 29-02 in respect of the application of such design to SMART MASK in the name of 1.Dr. Amit Kumar Ahuja 2. Ms. Himani Varolia 3.Mr. Amit Kumar 4.Mr. Arman Ul Haque 5.Mr. Anil Kumar 6.Meerut Institute Of Engineering & Technology

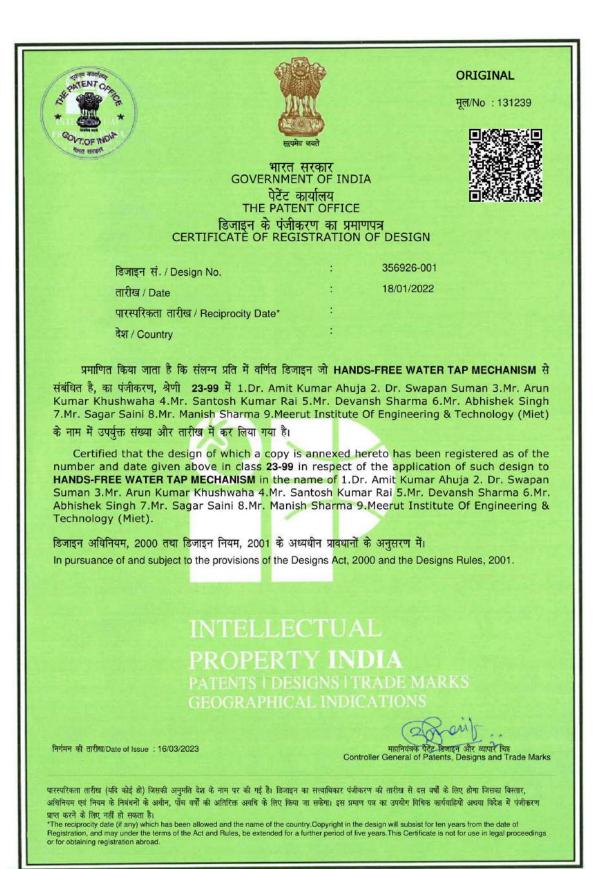
दिनाइन ऑपनियम, 2000 तथा दिनाइन नियम, 2001 के अध्ययीन प्रावधानों के अनुसरण में। In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

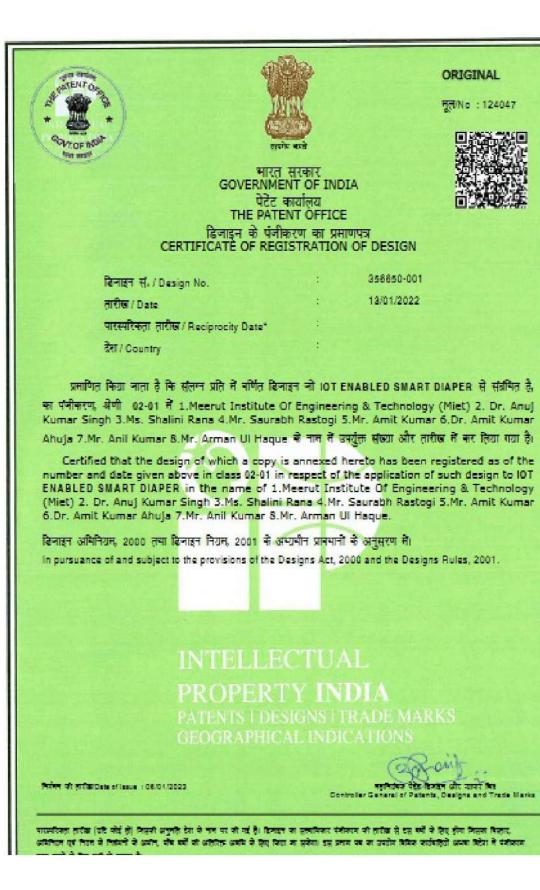
> INTELLECTUAL PROPERTY INDIA GEOGRAPHICAL INDICATION:

Print of prilatipate of teams : 09/01/2023

बारमरिकत लाग्नि (प्रति कोई हो) निवको अनुनति देश के नाम पर की गई है। विभारन का प्रत्यविकार वेलीकाल की तारीख में दम करें के दिया निवक विभागर,

The reciprocity date (if any) which has been allowed and the name of the country Copyright in the design will subsist for ten years from the date of Registration, and may under the farms of the Act and Rules, be extended for a further period of tive years. This Certificate is not for use in legal pro-









GLIMPSE OF ACTIVITIES @ AICTE IDEA Lab, MIET



IDEATHON @AICTE IDEA Lab, MIET























SKILLING PROGRAM @AICTE IDEA Lab, MIET







OPEN DAY FOR SCHOOL LEARNERS @AICTE IDEA Lab, MIET







FDP @AICTE IDEA Lab, MIET





GPS Map Camer

Meerut, Uttar Pradesh, India

Pradesh 250005, India

Long 77.640763°

N.H. 58, Delhi-Roorkee Highway, Baghpat Road Bypass Crossing, Meerut, Uttar









Meerut, Uttar Pradesh, India

Lat 28.973004°

XJFR+56M, Meerut, Uttar Pradesh 250005, India

GPS Map Can

GPS Map Ca



MEDIA COVERAGE @ AICTE IDEA Lab



मंगलवार २१ फरवरी २०२३

ाइडिया लैब द्वारा छह दिवसीय कौशल विकास कार्यशाला

र्वांग्स (आईओटी) भविष्य की तकनीक : डॉ र



आइंडिया लैंब शिक्षाविद एंबेडेड सिस्टम जाएगा। इंटरनेट ऑफ थिंग्स कोऑर्डिनेटर डॉ प्रियंका और आईओटी प्रौद्योगिकी आने के बाद भविष्य में ऐसे

आईसीटीई आइडिया लैब द्वारा छह दिवसीय कौशल विकास कार्यशाला का उद्घाटन

ंटरनेट ऑफ थिंग्स (आईओटी) भविष्य की तकनीक : डॉ नेहा मित्तल



एआईसीटीई आइंडिया लैब द्वारा प्रायोजित छह कोशल विकास कार्यशाला का आयोजन

तकनीक का वह विकास है, जिसमें कई गैजेटस व नेटवर्किंग के माध्यम से एक साथ जोड़ा जाएगा। इंटरने



आईओटी टेक्नोलॉजी विषय पर वर्कशॉप

मेरट। एआईसीटीई आइडिया लैब द्वारा एमआईईटी में एंबेडेड सिस्टम और आईओटी टेक्नोलॉजी विषय पर हुई वर्कशॉप का शुभारंभ चेयरमैन विष्णु शरण, वाइस चेयरमैन पुनीत अग्रवाल, निदेशक डॉ.बृजेश सिंह, डीन एकेडिमक डॉ.भावना मलिक, एचओडी डॉ.नेहा मित्तल, आइंडिया लैब कोऑर्डिनेटर डॉ प्रियंका शर्मा, मोहिनी सिंह और दीपक सिंह ने किया। डॉ नेहा मित्तल, दीपक सिंह, अभिलाषा जैन, अनिल वर्मा, अरमान रहे।

दैनिक जागरण

युवा जागरण



देनिक भास्कर

मंगलवार, २१ फरवरी, २०२३, मेरठ



छह दिवसीय कौशल विकास कार्यशाला का उद्घाटन

भारकर ब्यूरो, मेरढ। एआईसीटीई आइडिया लैब द्वारा प्रायोजित छह दिवसीय कौशल विकास कार्यशाला का आयोजन एमआईईटी में किया गया। इलेक्ट्रॉनिक्स एंड कम्युनिकेशन इंजीनियरिंग एंड कंप्यूटर साइंस आईओटी विभाग के संयुक्त तत्वावधान में एंबेडेड सिस्टम और आईओटी टेक्नोलॉजी विषय पर छह दिवसीय कार्यशाला का आयोजन किया जाएगा। कार्यशाला का उद्घाटन चेयरमैन विष्णु शरण, वाइस चेयरमैन पुनीत अग्रवाल, निदेशक डॉ. बृजेश सिंह, डीन एकेडमिक डॉ. भावना मलिक, एचओडी डॉ. नेहा मित्तल, आइंडिया लैब कोऑर्डिनेटर डॉ. प्रियंका शर्मा, प्रोग्राम कोऑर्डिनेटर मोहिनी सिंह और दीपक सिंह ने संयुक्त रूप से दीप प्रज्वलित कर किया। कार्यक्रम में

टी ने सीओ 2 लेजर कटिंग मशीन से बना राम मॉडल औघड़नाथ मंदिर समिति को भेंट किय



ो के छात्रों और शिक्षकों ने CO2 लेजर कटिंग मशीन से अयोध्या में राम मंदिर का एव एमआईईटी के चेयरमैन विष्णु सरन ने औघड़नाथ मंदिर समिति के अध्यक्ष सतीश कुमा



PARTICIPANTS EXPERIENCE @ AICTE IDEA Lab





'The working faculties are very cooperative and Idea Lab is having lot of things we can learn. Teachers are helping in nature.'

- ABHISHEK GOEL



'During Idea Lab Program I appreciate the opportunity to brainstorm & work on projects with diverse group of participants. It was best experience where it provides a creative space for exploring innovative ideas.'



'For participants Idea Lab is a unique & unforgettable experience in which they were happily immersed in scientific co-creation & are often surprised by their own ingenuity & we love it when that happens.'

-SOURAV



'The faculty members who gave their best.
They have inspired us in bringing up ideas
& also have given the directions for implementing it. It was a great experience in learning.'

-DIVYANSH





THANK YOU....

- idealab@miet.ac.in
- www.miet.ac.in
- N.H. 58, Delhi-Roorkee Highway, Baghpat Bypass Road Crossing, Meerut, Uttar Pradesh 250005